



UNIVERSITI PUTRA MALAYSIA

**AN ANALYSIS OF PERFORMANCE OF FOREST
CONCESSIONAIRES IN CAMBODIA**

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**MASTER OF SCIENCE
(TROPICAL FOREST RESOURCE MANAGEMENT)**

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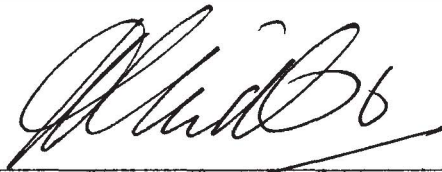
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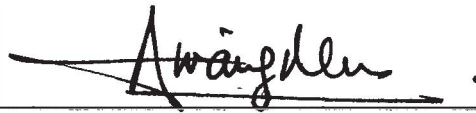
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**AN ANALYSIS OF PERFORMANCE OF FOREST
CONCESSIONAIRES IN CAMBODIA**

**BY
CHHUM SOVANNY**

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ABBREVIATIONS

AAC	Annual Allowable Cut
ADB	Asian Development Bank
CDC	Council for the Development of Cambodia
CIFOR	Center for International Forest Research
CoM	Council of Ministers
DFW	Department of Forestry and Wildlife
EIA	Environmental and Impact Assessment
ESIA	Environmental and Social Impact Assessment
FAO	Food and Agriculture Organization of the United Nations
FSC	Forest Stewardship Council
FTL	Forest Timber Licence
IA	Investment Agreement
ITTO	International Tropical Timber Organization
MAFF	Ministry of Agriculture, Forests and Fisheries
MEF	Ministry of Economy and Finance
MOE	Ministry of Environment
RGC	Royal Government of Cambodia
SFM	Sustainable Forest Management

ABSTRACT

The aim of this study was to highlight the forest management performance of forest concessionaires in Cambodia and to observe how concessionaires' characteristics influence their performance. Data and information were obtained mainly from the study on "Cambodia Forest Concession Review" supported by the Asian Development Bank (ADB). Data used in this study were background information on existing concessionaires, information charges against concessions and sustainable forest management rating of concessionaires. Cross tabulation analysis was carried out to observe the variation in the performance of the concessionaires relating to legal compliance of charges with existing forest law and regulations and forest management performance of concession based on internationally recognized principles of sustainable forest management. The results showed that 70% of the 20 concessionaires have committed illegal activities. About 90% among 10 concessionaires scored poorly in the sustainable forest management rating. The results of the analysis showed that foreign companies, those in the large concession area and higher capital investment have done more illegal activities. In terms of Sustainable Forest Management performance, foreign companies with higher capital investment performed better. It is recommended that the Royal Government of Cambodia should take the appropriate and prompt measures to monitor the performance of concessionaires and should improve its forest concession allocation policy in order to manage forest sustainably in Cambodia.

ABSTRAK

Tujuan kajian ini adalah untuk menampilkan tahap prestasi pengurusan hutan oleh konsesi-konsesi hutan di Kampuchea dan untuk memerhati bagaimana sifat-sifat konsesi-konsesi tersebut mempengaruhi prestasi mereka. Kebanyakan data dan maklumat kajian telah diperolehi daripada kajian "Tinjauan terhadap Konsesi Hutan di Kampuchea" yang dikelolai Bank Pembangunan Asia (ADB). Data tersebut memberikan maklumat latar belakang konsesi-konsesi sedia ada, maklumat denda disebabkan pelanggaran peraturan oleh konsesi-konsesi yang terlibat dan maklumat tahap prestasi pengurusan hutan secara lestari. Analisis telah dijalankan untuk memerhati kepelbagaian dalam prestasi konsesi-konsesi yang dikaji melalui tahap keserasian perundangan di antara denda yang dikenakan dengan undang-undang dan peraturan hutan sedia ada; dan melalui tahap pencapaian konsesi-konsesi tersebut dalam memenuhi prinsip-prinsip antarabangsa pengurusan hutan secara lestari. Hasil kajian menunjukkan bahawa 70% daripada 20 konsesi yang dikaji didapati melakukan aktiviti-aktiviti haram dan 90% daripada 10 konsesi yang dikaji didapati memberikan prestasi pengurusan hutan secara lestari yang tidak memuaskan. Analisis hasil kajian menunjukkan bahawa syarikat asing yang mempunyai kawasan konsesi yang besar dengan pelaburan modal yang tinggi didapati lebih banyak melakukan aktiviti haram. Berdasarkan prestasi Pengurusan Hutan secara Lestari, syarikat-syarikat asing dengan pelaburan modal yang tinggi menunjukkan tahap prestasi yang lebih baik. Adalah dicadangkan bahawa Kerajaan DiRaja Kampuchea seharusnya mengambil langkah tegas yang sesuai untuk memantau prestasi konsesi-konsesi yang terlibat dan memperbaiki polisi pengagihan konsesi hutan demi menguruskan hutan di Kampuchea secara lestari.

CHAPTER ONE

INTRODUCTION

Problem Statement

Sustainable forest management is a major issue in world forestry in general and particular in tropical forestry. International Tropical Timber Organization (ITTO) has published “ITTO guidelines for the sustainable management of natural tropical forests” (ITTO, 1990) and “Criteria for the measurement of sustainable tropical forest management” (ITTO, 1992) in preparation to achieve its target to produce tropical timber for export from sustainably managed forests by the year 2000 (ITTO, 1990). Other organizations, such as World Wide Fund for Nature (WWF) have set a target of 1995 to achieve sustainable forest management (Elliot, 1991).

Forest concessions have been reasonably successful in encouraging forest based economic development in a number of forest rich developing countries. They have not been very successful in encouraging sustainable management of tropical forest (Repetto and Gillis 1988; Poore *et al.* 1989; Grut *et al.* 1991). For example, in Indonesia forest concession policies and the country’s rich tropical forest contributed to the very remarkable growth in forest products output, export and contribution to economic growth, particularly since 1980 (Gray 1996b). However, this contribution may be short lived. As a result of the rapid expansion of forest production, the supply of highly valuable tropical timber from natural forests will begin to shrink by the year 2000 (Gray 1996b).

Poor *et al.* (1989), in a widely quoted study of tropical forest management, found that less than 1% of natural tropical forests (less than 1 million hectares) were under sustainable forest management. However, the situation may not be as bad as the figures suggest. Not all countries with tropical forests were included and only rough estimates were made for major forest countries such as Indonesia and Malaysia (Sharma *et al.* 1992). Elsewhere, Poor pointed out that several countries have

substantial areas of forest that do not quite quality as under sustainable management. A small additional effort would bring these forests under sustainable management, and in most countries logged over areas could be brought into sustainable forest production with little effort (Palmaer and Synnott 1992).

Cambodia is one of the tropical countries faces problems in achieving sustainable management of its variable forest and especially on forest concessions. Unless forests can be protected and managed, it will be little forest left to meet the country's growth in domestic demand for forest products, to meet increased export demands, to contribute to the country's economic development and development of the forest regions.

Objective of Study

The objectives of the study were:

- (i). To highlight the management performance of forest concessionaires in Cambodia.
- (ii). To analyze the variations in the performance in relation to concessionaires characteristics.
- (iii). To make recommendations towards improving forest concession allocation policy in Cambodia.

Scope of the Study

The study was limited to some aspects of concessionaires performance related. These aspects relate to legal compliance and SFM performance of forest concessionaires. Other aspects of forest management such as the production of other products and services such as water, recreation, protection of wildlife and environment are not covered due to limited time, data and resources.

Format of the Project

This Project is divided into five chapters. Chapter two presents a background on Cambodia forestry and literature regarding forest concession allocation system. Chapter three presents the methods used in study. The results and discussions are presented in Chapter four. Finally, Chapter five contains the conclusions and recommendations of the study.

CHAPTER TWO

LITERATURE REVIEW

Introduction

During the 1990s Cambodia has emerged from several decades of severe social unrest and it attempting to build a democratic society with effectively functioning institutions. In the past (and to some extent still at the present time) forest have been used to generate wealth for powerful individuals and groups. In this process little attention was paid to questions of sustainability or equity. The legacy of this is a large estate of heavily logged forest across the landscape, including land inside protected areas. Throughout the country one can observe a rapid, rather uncontrolled conversion of forestland to private estates, smallholdings or residential areas. Local communities have been essentially prevented from using the forests sustainably and have consequently felt alienated from the process of government.

As the country continues to stabilize, there will be a need to set in place a more coherent framework to address the deforestation and forest degradation of the past. Sustainable forest management of the country's degraded forest ecosystems is clearly a priority concern for the future in order to return both productive and protective functions to large areas of the landscape. It is impossible to consider the biophysical aspects of sustainability without at the same time considering the forest concession aspects. Any focus on sustainable forest management must embrace the role of concessionaires and also the local communities as key actors (as indeed they must be for other aspects of natural resource management).

Background

Forest Resource Base

Forest cover approximately 10.5 million ha, or about 58 percent of Cambodia's total land area (Map 1). Estimates indicate commercial management is only feasible in less than 4 million ha of the forest area (World Bank 1999). The National Protection Area System, which includes 23 areas designated for biodiversity and cultural protection, cover almost 3.5 million ha or 19 percent of country's total area. About 30 percent of the country's forest is in protected areas (Butterfield 1998a) (Map 2). The Protected Area System Covers representative ecosystems including evergreen, deciduous and edaphic forests and examples of fragile and critical habitats (World Bank/FAO/UNDP 1996). It also covers cultural landscapes such as temples of Angkor Wat. The system is classified as National Parks (7), Wildlife Sanctuaries (10), Protected Landscapes (3) and Multiple Use Areas (3). The November 1993 Royal Decree Designating the "Protection of National Areas" does not forbid logging in Protected areas, and all protected areas have experienced some degree of logging (ARD 1998).

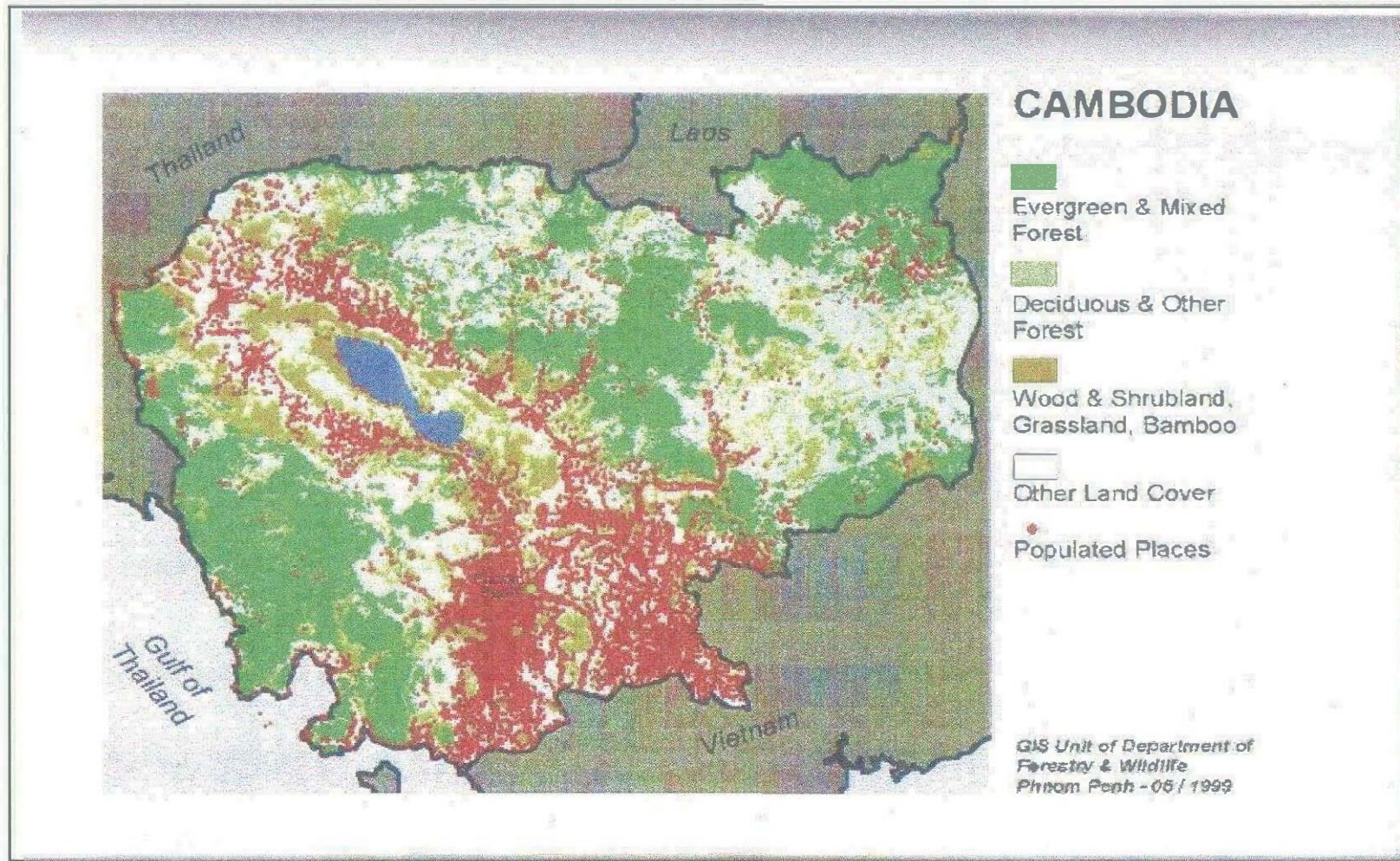
Forest resource information, as required for operational planning purposes, is limited. However, maps and databases have been developed to a point there they can be, and should have been, used for strategic planning. Forest inventories of a standard and sampling intensity adequate for commercial management have only been produced for a few areas. Further, the reliability of this data is questionable both because no systematic validation of it has been carried out. An additional factor that sheds doubt on the reliability of existing inventory data is that, in most cases, inventories and management plans for forest concessions were in fact made by Department of Forestry and Wildlife (DFW) staff under contract to the concessionaires. Yet the DFW staffs are at the same time the body responsible for validating and approving the inventories and management plans. Little is known about the condition of remnant or degraded deciduous forest, or of current levels of utilization. Besides the valuable evergreen forests, a large portion of lower value

deciduous and degraded forests have been included within the concession boundaries. Neither the concessionaires nor the DFW have plans to manage these commercial low value forests (Fraser 2000).

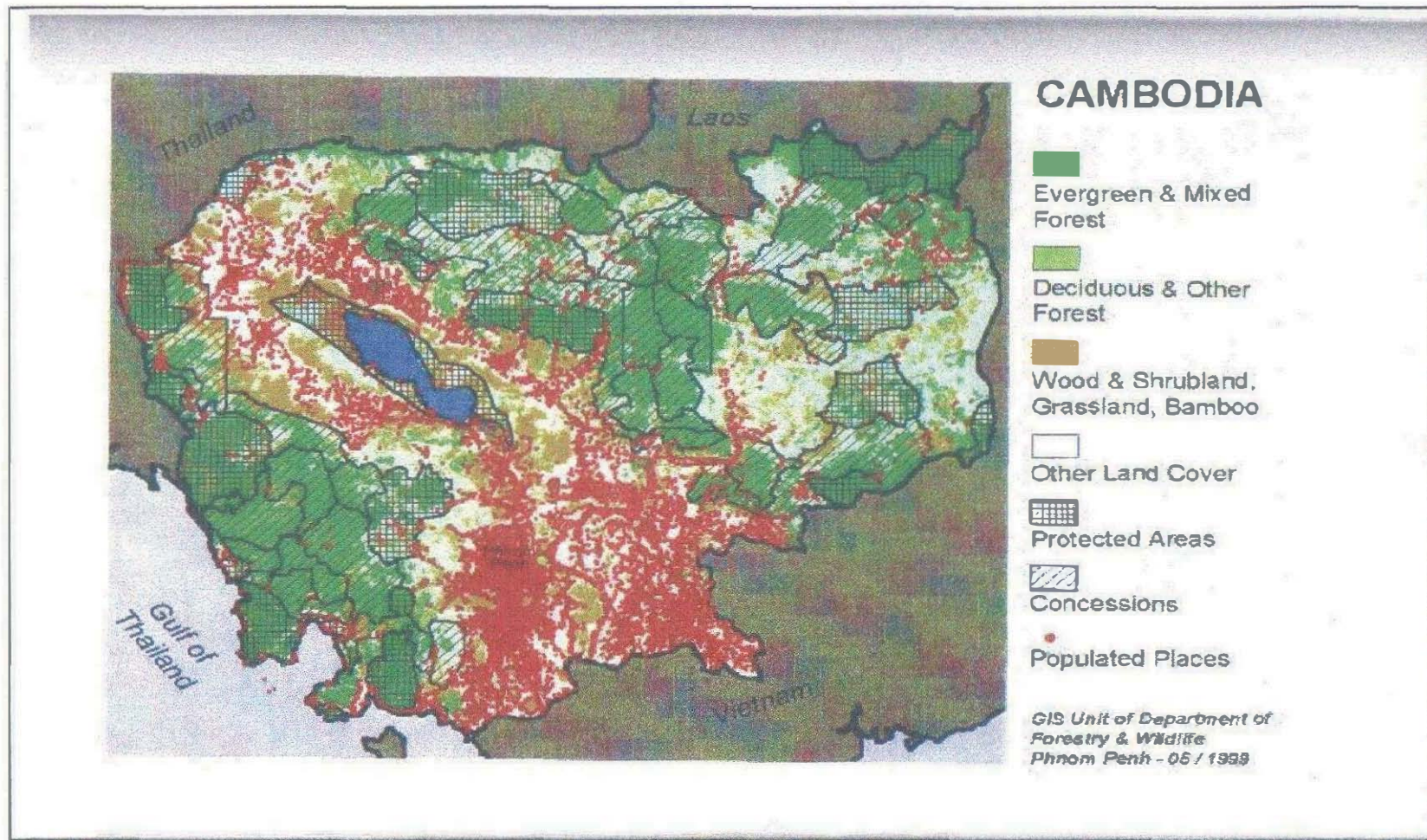
There are various estimates of the sustainable levels of production of the forest estate in Cambodia, in the intermediate term. The estimates of the sustainable AAC range between 500,000 m³ and 1 million m³. In terms of government revenues, this corresponds to somewhere between 25 to 50 million US dollars annually and in terms of market value, much more than this.

According to recent statistics, the amount of timber produced from “managed” forest, about 2 million ha altogether, was only 224,000 m³ in 1998. However, during the period of rampant logging between 1996 and 1998, the total log production in Cambodia, including illicit felling, was between 4 and 8 million m³, which, assuming that the AAC calculations apply to the nation’s forests as a whole, under the current management system, would correspond to between 8 and 16 years AAC.

Map 1: Forest Cover in Cambodia



Map 2: Protected Area and Concessions



Forest Sector Organization

The Department of Forestry and Wildlife (DFW), which is under the Ministry of Agriculture, Forestry and Fisheries, is responsible for the management of forest estate remaining outside protected areas. The Director General heads the DFW from its headquarters in Phnom Penh. The headquarters are organized into six offices, one research institute and three companies. Two of the companies operate largely independently (COLEXIM and CASOTIM, both of which are concessionaire companies) and the remaining eight divisions have 764 staff, of which 287 are professionals. In the field offices stationed in the 23 provinces, there are 1004 staff, of which 153 are professionals. The Forestry Offices around the country are positioned under the Provincial or District Department of Agriculture. The authority and chain of command under this system is not totally clear, though provincial authorities appear to have stronger control over the Forestry Offices than the central DFW office does. The concession based forest management system is administered from Phnom Penh, although a more dynamic system, operating under clearly defined responsibility and authority and direct line of command, is needed.

Forest Policy

The RGC has not as yet produced an official forest policy statement. In order to analyze policy issues therefore, an implicit policy has been construed, based on current practices within the forestry sector, ad hoc government decisions and directives made to address emerging problems, recent agreements with the donor community, various statements of senior government officials, and decrees. This apparent policy can be broadly described in economic, environmental and social terms.

Economic Policy

A concession based forest utilization system is the most prominent element of the current policy. A log export ban, together with the use of various legal instruments suggest that this policy extends to encompass downstream processing as well as log harvesting. This system is expected to generate financial benefits through both royalties from primary production and value-added benefits from the industrial processing that takes place within the country. The intended mechanism by which this approach is to be sustained is the preparation and implementation of management plans by concessionaires, and their scrutiny, approval and monitoring by the RGC.

Environmental Policy

Cambodia has allocated one third of its forest resources (about 3.3 million ha) as protected forest under various management objectives. The extent of this allocation is substantial and probably matches, if not exceeds, that advocated by international conservation bodies. The ministry of Environment (through its Department of Nature Conservation) is responsible for managing the protected area system, at present relying primarily on assistance from donor community. The allocation of forest area to protected areas was made without a rational land use planning and allocation process (similar to allocation of concessions to commercial interests), and hence the degree to which the allocation was optimized with other considerations is questionable and disputed by different interests. The MOE makes genuine efforts to ensure that protected areas are managed, including active recognition of local participation in protected area management, but is severely constrained in terms of resources to fulfill this role, particularly manpower and operational funds. The large rural population of Cambodia and the degree of their reliance on natural resources create a difficult environment for the management of protected areas. Moreover, the greed of illegal loggers (and of their collaborators in influential positions) has caused serious damage to the forests that are supposed to be under protection. However, with increased awareness and determination of the RGC to combat this problem, the

situation has recently started to improve. This apparent improvement is encouraging, but much remains to be done and the damage that has already been inflicted on protected areas is regrettable.

Social Policy

Little has been achieved in the forestry sector in terms of realizing the key role of forest resources in meeting the livelihood and subsistence needs of the nation's rural people. Until recently the existence and dependence of rural communities within forest area was not acknowledged in resource allocation and planning. Neither the geographical presence of local communities, still less their traditional use of and dependence on natural resources, were recognized or documented. Consequently, appropriate measures to safeguard the rights and needs of these communities were not taken into account in the allocation of forest concessions, the design of concession agreements, or the preparation of forest management plans. Moreover, there are no development or management plans for extensive low value forest areas where rural communities have established economic ties. Some NGOs have made efforts to integrate the needs of rural communities with current forest use. However, these measures remain limited and largely experimental or/and localized. While the RGC is not obstructive to these experiments, no effective program has been developed to increase the involvement and participation of rural communities in utilizing and managing these forest resources. Further, the DFW is reluctant to acknowledge the customary rights of rural communities, through fear of losing control over forestland.

Planning and Management

Forest in Cambodia can be allocated in to three basic categories: i) Production forest, ii) protection forest, and iii) low value forest (dry deciduous and degraded forests). The management and utilization of production forests are entrusted to private companies under the control of the DFW. The management of protected areas is the